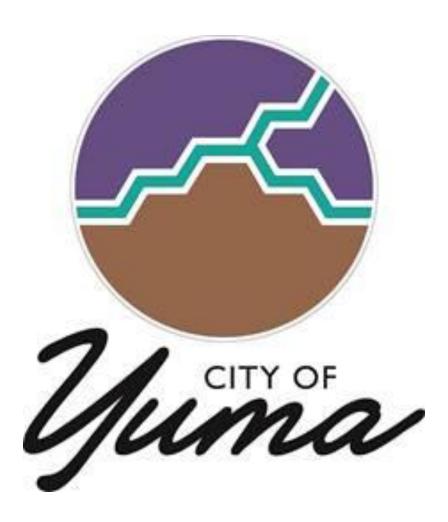
# Standards for Encroachment of Structures Into the Public Right-of-Way



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#### **Document Terms**

Antenna. Communications equipment that transmits or receives electromagnetic radio frequency signals and that is used in providing wireless services.

Antenna Mounting Bracket. The hardware required to secure the antenna to the pole.

Antenna Mounting Post. A vertical post or pipe that the antenna mounting bracket is mounted to in order for the antenna to be attached to the pole.

Antenna Shroud. A three-sided cover that is mounted at the base of the antenna to conceal the appearance of the cables and wires from the hand-hole port on the pole to the bottom-fed antenna.

Canister. A cylindrical cover used to conceal the antenna(s), amplifier(s), radio(s), cables, and wires at the top of a pole.

Dog House. A plastic or metal cover that attaches to the base of a pole to conceal the transition point between the underground cables and wires to the vertical section of the pole.

Equipment Cabinet or Building. An enclosure that is mounted above base flood elevation or placed on a concrete slab that contains improvements, personal property, and facilities to operate its Antenna(s) for Permitted Uses including: radio receivers, transmitters, related facilities, and/or cabinets, related cables and utility lines, location-based power source (including a battery), the electrical meter and any other equipment necessary for the operation of wireless antenna.

Ground Mounted Equipment. Any equipment that is mounted to a separate post or to a foundation on the ground.

Handhole. A hole large enough only for the insertion of a hand arm to access internal cables and wires located within a wireless support structure.

Light Emitting Diode (LED). A type of lighting fixture installed on City streetlight and traffic signal poles.

*Light Fixture.* The lighting unit or luminaire that provides lighting during the evening hours or during the hours of darkness.

Luminaire Mast Arm. The horizontal post that attaches a light fixture to a light pole or traffic signal pole.

*Microcell.* A device that is connected to aerial facilities and used solely for transmitting, processing and receiving voice and data wireless telecommunications services, without any associated ground mounted equipment. The device is often referred to as an ASME (Aerial Strand Mounted Equipment).

Monopole. A single pole attached to a permanent foundation.

Omni Antenna. A style of antenna that projects radio frequencies in a 360 degree pattern.

Panel Antenna. A style of antenna that is rectangular in shape and that projects radio frequencies in a single directional pattern.

Pole Diameter. The measurement taken from the outer edges of a pole.

RAD Center. The center point of radiation emitted from an antenna. Measurements on facility plans are commonly calculated from this point.

Remote Radio Heads (RRH) / Remote Radio Units (RRU). Electronic devices that are used to amplify radio signals in order to increase the distance of the outgoing radio signal from the antenna.

Right-of-Way. As defined for wireless sites in A.R.S. § 9-591(18) means the area on, below or above a City-owned roadway, highway, street, sidewalk, alley, or public utility easement. Right-of-way does not include a Federal Interstate Highway, a state highway or state route under the jurisdiction of the Department of Transportation, a private easement, property that is owned by a special taxing district, or a utility easement that does not authorize the deployment sought by the wireless provider.

Sight Visibility Triangle (SVT). The traffic engineering standard that requires clear view by the driver of a vehicle to crossing traffic at a stop sign, driveway or intersection. In order to achieve clear visibility of the cross traffic, the land areas in the sight visibility triangle has specific maximum heights on landscaping, cabinets, and other potential view obstructions.

Signal Head. The "Red, Yellow and Green" light signals at a signal-controlled intersection.

Signal Head Mast Arm. The horizontal extension that has the signal heads mounted to it and attaches to the traffic signal pole.

Small Wireless Facility (SWF). A Wireless Communication Facility that meets both of the following qualifications:

- 1. All antennas are located inside an enclosure of not more than six (6) cubic feet in volume or, in the case of an antenna, that has exposed elements, the antenna and all of the antenna's exposed elements could fit within an imaginary enclosure of not more than six (6) cubic feet in volume.
- 2. All other wireless equipment associated with the facility is cumulatively not more than twenty-eight (28) cubic feet in volume, or fifty (50) cubic feet in volume if the equipment was ground mounted before the effective date of this section. The following types of associated ancillary equipment are not included in the calculation of equipment volume pursuant to this subdivision:

- a. An electric meter
- b. Concealment elements
- c. A telecommunications demarcation box
- d. Grounding equipment
- e. A power transfer switch
- f. A cutoff switch
- g. Vertical cable runs for the connection of power and other services

Stealth and Concealment. The application of design standards including but not limited to shrouds, decorative and faux elements, and ground equipment screening used to ensure wireless facilities are designed to blend in with the surrounding area to the maximum extent feasible.

Stealth Building Element. A non-residential building element designed to conceal and/or camouflage wireless communications facilities, including but not limited to a wall mount, clock tower, cupola, or church steeple.

Stealth Structure. A structure designed to conceal and/or camouflage wireless communications facilities. Structures may include but are not limited to a free-standing structure such as an artificial cactus or tree, or a sculpture. Stealth structures do not include a flagpole, monopole with an attached flag, or a monopole with a minimal design feature.

Wireless Support Structure (WSS)

#### 1. Any of the following:

- a. A freestanding structure, such as a monopole
- b. A tower, either guyed or self-supporting
- c. A sign or billboard
- d. Any other existing or proposed structure designed to support or capable of supporting small wireless facilities

#### 2. Does not include a utility pole

*Utility Pole*. A pole or similar structure that is used in whole or in part for communications services, electric distribution, lighting or traffic signals. Utility pole does not include a monopole.

#### **Applicability**

The standards contained in this manual shall apply to all structures located in the City rights-of-way.

#### 1.0 General Standards for All Structures

The following standards shall apply to structures located in the City Rights-of-way and Public Utility Easements.

#### 1.1 Location Standards

- 1) Separation Standards from Underground Utility Infrastructure
  - All structures shall maintain the following minimum separation distances (measured horizontally from furthest exterior edge of each) from existing underground utility infrastructure:
    - i. Six (6) linear feet from water lines;
    - ii. Six (6) linear feet from sewer lines:
    - iii. One (1) linear foot from Telecommunications equipment;
    - iv. One (1) linear foot from Cable Television lines; and
    - v. Six (6) linear feet from all other utility infrastructure.
  - b. The City, in its sole discretion, may grant a variance, upon approval by the City Engineer, from these horizontal separation standards, dependent on factors specific to the site.
  - c. In the case where there is an issue with horizontal separation from other underground utilities, the authorized installer may elect to work with the impacted utility provider to have lines, pipes or property moved so that minimum separation can be achieved. All relocation of City-owned or privately-owned utilities shall be at the sole expense of the authorized installer.
- Separation Standards from an Original Streetlight Pole or Traffic Signal Pole
  - a. All structures shall be located a minimum five (5) feet from the original pole and shall otherwise comply with the Traffic Signal section and Streetlight section of the Standard Detail Drawings of the City of Yuma. The City, in its sole discretion, may increase the minimum separation standard to ensure construction can occur safely.
- 3) Separation Standards from Sidewalks or Curbs
  - a. All structures shall be separated from an existing sidewalk by a minimum of one (1) foot or from the back of curb by a minimum of two (2) feet. The City, in its sole discretion, may increase the minimum separation standard to ensure the safe use of the adjacent area.
  - b. Where adjacent to a meandering sidewalk, structures shall be placed on the side furthest away from the street.
- 4) Sight Visibility Triangles (SVT)
  - a. All structures shall be installed in a location that does not

interfere with City SVT safety requirements as determined by the City Traffic Engineer.

- 5) Interference with or Obstruction of City Operated Networks, Cameras or other Data Gathering/Transmitting Instruments or Equipment
  - a. The selection of a proposed location for any facility in the public right-of-way shall consider the potential for interference with or obstruction of any City operated networks, cameras or other data gathering or transmitting equipment.
  - b. The City may require a technical report to determine the potential for obstruction or interference with City networks, cameras or other data gathering or transmitting equipment and if deemed necessary, may require a re-design or re-location of the proposed facility in order to remove the obstruction or interference.

#### 1.2 Standards for Equipment Mounted to a Wireless Support Structure

- 1) Antenna Mounting Standards
  - a. All antennas shall be mounted to the pole so that the distance from the "face" of the wireless support structure, measured to the back of the antenna does not exceed nine (9) inches.
  - b. Mounting posts shall be trimmed so that the posts do not extend higher than the top of the antenna or protrude lower than the antenna, unless necessary to install a shroud.
  - c. All pole mounted equipment shall be a minimum of twelve (12) feet above the existing grade of the foundation.

#### 2) Antennas

- a. All antennas for a Small Wireless Facility shall fit within an imaginary enclosure of not more than six (6) cubic feet in volume in accordance with A.R.S. § 9-591(19)(a). (NOTE: This volume does not include antenna cable shrouds when required.)
- b. All antennas with exposed cables from the bottom of the antenna shall have a shroud installed on the antenna or antenna mounting posts to conceal the cables.
  - i. The City may require the shroud to be installed at a forty-five (45) degree angle (away from the bottom of the antenna; toward the pole) or a ninety (90) degree angle (parallel to the bottom of the antenna).
  - ii. The shroud shall extend from the bottom of the antenna to two (2) inches below the bottom of the nearest handhole.

#### 3) Canisters

- a. Canisters are considered a concealment element and are not associated with the function of the antenna, therefore when designed to cover an antenna array, the canister will not count towards the maximum cubic feet allowed in accordance with A.R.S. § 9-591(19)(a).
- b. When antennas are placed in a canister, the canister shall be no larger than eighteen (18) inches in diameter, measured from the outside edges.
- c. Antennas located within a canister shall have the canister mounted to a base plate at the top of the vertical section of the pole.
- d. Cables protruding from the canister shall be concealed within the canister or by a shroud at the point where the canister is mounted to the base plate.

#### 4) Remote Radio Heads (RRH) / Remote Radio Units (RRU)

- a. Remote Radio Heads/Units are not considered to be part of the antenna per State Law § 9-591(19)(a).
- b. All RRH/RRU units shall be placed behind antennas or within a canister and fully concealed.
- c. Where permitted, the RRH/RRU shall be calculated as part of "All other wireless equipment associated with this facility." For Small Wireless Facilities, the maximum size permitted is twenty-eight (28) cubic feet according to A.R.S. § 9-591(19)(b).

#### 1.3 Standards for Ground-mounted Equipment

#### 1) General Location Requirements

- a. All ground-mounted equipment, including but not limited to equipment cabinets or power pedestals, shall be placed as far as practical to the back of the ROW while maintaining at least three (3) feet of ingress/egress in the ROW around the equipment.
- b. Sight Visibility Triangles (SVT). All ground-mounted equipment shall be installed in a location that does not impair or interfere with SVT safety requirements as determined by the City Traffic Engineer.

#### 2) Screening Requirements

- a. All ground-mounted equipment shall be contained within low-profile cabinets.
- b. Cabinets shall be fully screened from view by a decorative solid enclosure equal to or exceeding the height of the equipment

- cabinet.
- c. Enclosure access gates shall be opaque, compatible with the enclosure material, and where feasible shall be facing away from the street or primary public view.
- c. The type of screening materials and design shall be architecturally compatible with buildings and fencing in the immediate vicinity. The use of barbed wire, razor wire, chain link, woven wire or other similar material is prohibited.
- d. The City, in its sole discretion, may waive the screening requirement if it determined that the equipment is located out of the public view. If the City determines that screening is not required, the City may specify the paint color of the ground-mounted equipment or require alternative screening solutions such as landscaping.
- e. Any disturbed landscaping or irrigation systems shall be returned to its original state with materials approved by the City.

#### 3) Decals and Labels

- a. Decals, logos and other identification information from the equipment manufacturer shall be removed unless required for warranty purposes or by local, state or federal law.
- b. An "Emergency Contact" decal may be permitted on the ground equipment.
- c. The ground-mounted equipment shall not have any flashing lights, sirens or regular noise other than a cooling fan that may run intermittently.

#### 4) Equipment adjacent to Residential

a. Unless otherwise specified by the City, a ground-mounted equipment cabinet that contains an air-conditioning unit (not a fan only), shall be screened from view with landscaping and setback a minimum of fifteen (15) feet from lots with a Residential General Plan designation.

#### 5) Electric Meters

- a. Electric meters shall be placed in a location that ensures adequate ingress and egress clearances are maintained from private property lines and driveways.
- b. All electric meters shall be installed in a location that does not impair or interfere with the SVT safety requirements of the City.
- c. The electric meters shall be contained within a "Myers-type" or "Milbank-type" pedestal cabinet that is painted to match the ground-mounted equipment or as specified by the City.

d. In the case where screening is not required, the City may specify the paint color of the electric meter cabinet.

#### 1.4 Removal Standards

- 1) Removal of City-owned Equipment
  - a. The City shall determine what original components, (e.g., original pole, mast arm(s), signal heads and luminaire, etc.), shall be returned, at no cost to the City, by the authorized equipment installer after the removal process is complete.
  - b. If the City declines to accept some or all of the original components, then only those components the City wants to retain shall be delivered to the City and the remaining components shall be appropriately discarded.

#### 2) Removal of Existing Foundations

- a. The concrete pole foundation for an original streetlight pole, traffic signal pole or other structure shall be removed by the authorized equipment installer as instructed by the City:
  - i. Partial Removal The original pole foundation shall be removed and lowered to a level that is twelve (12) inches below existing grade. The remaining foundation shall then be covered with eight (8) inches of native soil, followed by four (4) inches of one-half (1/2") inch to three (3/4") quarter inch decomposed granite material.
  - ii. Complete Removal If it is determined that a complete foundation removal is required, all materials (concrete, rebar, metals, bolts, etc.) shall be removed. The City Engineer may determine, on a case-by-case basis, the type of backfill material and compaction required.

#### 1.5 Miscellaneous Provisions

- 1) Calculating the Base Height of an Existing Pole
  - a. The base height, from which the calculation for the "increase in pole height" is referenced to determine overall pole height, shall be calculated as follows:
    - i. Light Pole
      - A light pole with a separate luminaire mast arm mounted to the vertical pole shall use the top of the vertical pole as the base height.
      - A light pole, with the luminaire mast arm

integrated (e.g. telescopic style pole) into the top vertical section of the pole, shall use the point on the pole where the mast arm is connected <u>plus</u> twenty-four (24) inches as the base height.

#### ii. Traffic Signal Pole

 A traffic signal pole with a luminaire mast arm that is mounted above the signal head mast arm to the pole shall use the top of the vertical portion of the pole as the base height.

#### 2) Cables, Wires and Jumpers

- a. All cables, wires and jumpers shall be located inside a conduit that runs within the caisson and structure, with the exception of where such cables or wires attach to the antenna ports.
- b. For structures in the right-of-way, all electrical wires for the streetlight luminaire, traffic signal heads, and any City device shall be new and connected to the existing power source.

#### 3) Hand Holes

- a. All hand hole locations shall be identified on the facility plans with the application submittal.
- b. All hand holes shall be concealed to the maximum extent feasible.
- c. Hand holes shall be located in a way that ensures the maximum concealment of wires and cables.

#### 4) Identification and Information Decals

- a. For Wireless Communication Facilities, a 4" x 6" Radio Frequency safety decal shall be mounted no less than twenty-four (24) inches from the bottom of the antenna, facing away from the street.
- A discreet site identification or number shall be permitted on the structures. The size, color and location of all proposed decals shall be approved by the City.
- c. Unless required by local, state or federal law, no advertisements or identifying logos shall be placed on any structure in the right-of-way.

#### 5) Alternative Cable/Wire Concealment Options

a. An exterior cable chase and/or dog house may be permitted in areas where the visual impact would not be significant to the surrounding properties.

b. Where permitted, the materials and paint color of the cable chase and dog house shall be compatible with the proposed structure and shall be reviewed and approved by the City.

#### 2.0 Standards for Small Wireless Facilities on Light Poles

#### 2.1 General Standards

- 1) All SWF shall be designed to minimize the visual impact to the surrounding area to the maximum extent feasible.
- 2) Replacement poles in City ROW shall be designed to match the City of Yuma approved streetlight poles.
- 3) All plans shall be signed and sealed by a Professional Engineer registered with the State of Arizona.
- 4) All streetlight poles are subject to review by the City to ensure compliance with City Standards.

#### 2.2 Detailed Standards

- 1) New or Replacement Pole Height
  - a. A new or replacement pole may be installed in the City right-ofway without zoning review if one of the following height requirements is met:
    - i. Up to a ten (10) foot increase, not to exceed fifty (50) feet total (whichever is less), per A.R.S. § 9-592(I)(1); or
    - ii. Up to forty (40) feet above ground level, per A.R.S.§ 9-592(I)(2).

#### 2) Pole Diameter

a. The overall pole diameter of a replacement pole shall increase no more than 100% for poles with original diameters up to 8 inches and no more than 80% for poles with original diameters larger than 8 inches.

#### 3) Luminaire Mast Arms

a. All luminaire mast arms shall be the same length as the original luminaire arm, unless the City requires the mast arm to be different (longer or shorter) based upon the location of the replacement pole.

- b. Unless otherwise approved, all luminaire mast arms shall match the arc (if applicable) and style of the original luminaire arm.
- c. The replacement luminaire mast arm shall be at the same height above the ground as the existing luminaire.

#### 4) Luminaire Fixtures

- a. All replacement poles shall have the City standard light-emitting diode (LED) light fixture installed, unless otherwise directed by the City.
- b. All replacement light fixtures shall have a new photo-cell or sensor to match the City Standard where applicable.

#### 5) Pole Foundation

- a. All pole foundations shall conform to the City adopted specifications and shall be modified by a Professional Engineer registered in the State of Arizona to support all proposed pole mounted equipment.
- b. The City may accept a foundation that has been designed to meet the "worst case" scenario for soil conditions across all of the proposed sites.
- c. The City may approve alternative "spread" foundations on a case-by-case basis if there are on-site limitations relating to the depth of utilities.
- d. A separate, one-inch diameter conduit shall be installed in the pole foundation for use by the City to house all necessary wires and cables. This conduit shall be trimmed to three (3) inches above the top of the caisson.
- e. The height of the pole foundation shall be a minimum of two (2) inches above grade if located in a hardscape area or a minimum of six (6) inches above finished grade if located in a turf area. If the pole foundation encroaches into any portion of a sidewalk, then the pole foundation shall be installed flush with the sidewalk.
- f. The City may require shrouds for the streetlight pole mounting bolts, depending on the location of the pole.

#### 6) Painting of Replacement Pole

- a. If the replacement pole is an unpainted galvanized pole, the pole shall not be painted or have a finish unless otherwise specified by the City.
- b. If the replacement pole is painted as required by City standards, the new pole shall match the existing color and finish unless otherwise specified by the City.

#### 7) Painting Antennas and Mounting Equipment

- a. All antenna mounting brackets and hardware, antenna mounting posts, cables, shrouds and other equipment mounted on a new or replacement unpainted galvanized pole shall be painted Sherwin Williams "Web Grey" (SW7075) color or equivalent, unless otherwise specified by the City.
- b. All antenna mounting brackets and hardware, antenna mounting posts, cables, shrouds and all other equipment mounted on a painted new or replacement pole shall be painted to match unless otherwise specified by the City.

#### 8) Pole Numbers

a. Wireless providers shall install pole numbers on each replacement pole (to match the number on the existing streetlight pole being replaced) per City requirements.

#### 3.0 Standards for Small Wireless Facilities on Traffic Signal Poles

#### 3.1 General Standards

- 1) All SWF shall be designed to minimize the visual impact to the surrounding area to the maximum extent feasible.
- 2) Replacement poles shall be designed to match the City of Yuma approved traffic signal poles.
- 3) All plans shall be signed and sealed by a Professional Engineer registered in the State of Arizona.
- 4) All traffic signal poles are subject to review by the City and shall comply with City standards.

#### 3.2 Detailed Standards

- 1) New or Replacement Traffic Signal Pole Height
  - a. A new or replacement pole may be installed in the City right-ofway without zoning review if one of the following height requirements is met:
    - i. Up to a ten (10) foot increase, not to exceed fifty (50) feet total (whichever is less), per A.R.S. § 9-592(I)(1); or
    - ii. Up to forty (40) feet above ground level, per A.R.S.§ 9-592(I)(2).

#### 2) Overall Height of Replacement Traffic Signal Pole

a. The height of the replacement pole is measured from grade to the top of the antenna canister or the top of the antennas if the antennas are the highest elements.

#### 3) Increase in the Pole Diameter

- a. If the replacement pole is a taper design, the diameter of the base section of the replacement pole diameter shall not exceed one (1) foot or a 100% increase in the diameter of the base section, whichever is less.
- b. If the replacement pole is non-tapered, then the diameter of the base section shall be equal to the top section and the pole diameter shall not exceed one (1) foot or a 100% increase, whichever is less.

#### 4) Signal Mast Arms

- a. The traffic signal mast arms shall be the same length as the original signal mast arm unless the City requires the mast arm to be different (longer or shorter) based upon the required location of the replacement pole.
- b. All signal mast arms shall match the arc (if applicable) and style of the original signal mast arm.
- c. The replacement signal mast arm shall be at the same height above the ground as the existing signal mast arm.

#### 5) Luminaire Mast Arms

- a. All luminaire mast arms shall be the same length as the original luminaire arm unless the City requires the mast arm to be different (longer or shorter) based upon the required location of the replacement pole.
- b. All luminaire mast arms shall match the arc (if applicable) and style of the original luminaire arm.
- c. The replacement luminaire mast arm shall be at the same height above the ground as the existing luminaire.

#### 6) Signal Heads

- All existing signal heads shall be replaced, at no cost to City, with new signal heads and light-emitting diode (LED) indications, per Arizona Department of Transportation (ADOT) Traffic Signal Standards.
- b. All signal heads and indications shall be procured from a City approved traffic signal supplier or manufacturer.

#### 7) Luminaire Fixtures

- a. All replacement poles shall have the City standard LED light fixture installed.
- b. All replacement light fixtures shall have a new photo-cell or sensor installed to City standards, where applicable.

#### 8) Other City Elements on Signal Mast Arm or Pole

a. All existing emergency signal detection units, video detection cameras, video cameras, cross walk service buttons, cross walk signals, and any other pedestrian or traffic devices shall be replaced with new units by wireless provider and installed at no cost to the City. All equipment shall be procured from a list of City approved suppliers.

#### 9) Signs and Other Attachments

a. All street name plates or signs, directional signs and any other City approved signs shall be replaced with new signs at no cost to the City. All signs and attachments shall be procured from a list of City approved suppliers.

#### 10) Traffic Signal Pole Foundation

- a. All pole foundations shall conform to the City's standards and specifications on traffic signal pole foundation design and shall be modified, as necessary, to accommodate wireless communications equipment, hand holes and cables.
- b. The authorized installer shall install a three (3) inch diameter conduit in the pole foundation designated for use by the City to contain the cables and wires associated with the signal heads, luminaire and all devices on the signal and luminaire mast arms. The conduit shall be trimmed to three (3) inches above the top of the pole foundation.
- c. In addition to the conduit described in "b" above, the authorized installer shall install conduit running from the pole foundation to six (6) inches above the signal mast arm, in order to contain all cables and wires associated with the WCF:
  - i. One, six (6) inch diameter conduit in the pole foundation;
  - ii. Two, four (4) inch diameter conduits in the pole foundation.
- d. Pole Foundation Height Above Ground Level

- i. If the pole foundation is in a landscaped or unimproved area, the height of the caisson shall be two (2) inches above finished grade. However, if the pole foundation is adjacent to or within a sidewalk or ramp, the height of the pole foundation shall be flush with the surface of the immediate area.
- ii. Shrouds for the traffic signal pole mounting bolts may be required for the replacement pole.

#### 11) Finish of Pole, Antennas and Mounting Equipment

- a. City specifications for the finish of Traffic Signal Poles are provided in the current ADOT Standards.
- b. Any antennas and mounting equipment shall be painted or designed in accordance with City standards.
- c. Antennas, mounting equipment and Traffic Signal Poles shall be painted, or constructed, with non-reflective materials.

#### 12) Construction of Traffic Signal

a. Construction and installation of the replacement traffic signal pole, including the mast arms, signal heads and devices, shall be performed by a City approved Contractor with a minimum of five (5) years of experience installing traffic signals in Arizona.

#### 4.0 Standards for Small Wireless Facilities on Existing Utility Poles

#### 4.1 General Standards

- A SWF shall be designed to blend in with the surrounding streetscape with minimal to any visual impact.
- 2) A SWF mounted on an existing third party-owned utility pole is subject to more detailed standards provided below.
- 3) All plans shall be signed and sealed by a Professional Engineer registered with the State of Arizona.

#### 4.2 Detailed Standards

- 1) Replacement Utility Pole Height
  - A replacement pole may be installed in the City right-of-way without zoning review if one of the following height requirements is met:

- i. Up to a ten (10) foot increase, not to exceed fifty (50) feet total (whichever is less), per A.R.S. § 9-592(I)(1); or
- ii. Up to forty (40) feet above ground level, per A.R.S.§ 9-592(I)(2).

#### 2) Overall Height of Replacement Pole

a. The height of the replacement pole is measured from grade to the top of the antenna canister or the top of the panel antennas if the antennas are the highest elements.

#### 3) Antennas and Equipment on Existing Utility Pole

- a. An existing wood utility pole used for a SWF shall have the antennas contained within an eighteen (18) inch canister mounted at the top of the pole.
- b. Antennas on a metal pole shall have the same RAD center to ensure the antennas will be at mounted at the same height on the pole.
- c. Unless otherwise approved, the cables and wires from the base of the pole to the antennas shall be installed in a conduit or cable chase outside of the pole, facing away from the street or away from the adjacent street.
- d. If a "dog house" is required as a transition point connecting the underground cables and wires from the ground mounted equipment to the pole, the City shall provide the design specifics as needed to conceal the connection point with the least amount of visual impact possible.

#### 4) Painting Standards

- a. If the replacement pole is an unpainted galvanized pole, the pole shall not be painted or have a finish unless otherwise specified by the City.
- b. If the existing or replacement pole includes a dog house for the transition of the cables and wires to the pole, the dog house shall be painted the same color as the pole or a color specified by the City.
- c. All antenna mounting brackets and hardware, antenna mounting posts, cables, shrouds and other equipment mounted on a new or replacement unpainted galvanized pole shall be painted Sherwin Williams "Web Grey" (SW7075) color or equivalent, unless specified otherwise by the City.
- d. All antenna mounting brackets and hardware, antenna mounting posts, cables, shrouds and all other equipment mounted on a painted new or replacement pole shall be painted a color specified by the City.

e. If the antenna is mounted on a wood pole, the color of the antenna, antenna canister, mounting brackets and posts, shrouds and cable chases shall be painted a color specified by the City that will closely match the color of the wood.

#### 5.0 Standards for Small Wireless Facilities on New Poles and Support Structures

The City may approve a SWF on a new pole or wireless support structure in the right-of-way (not a replacement of an existing pole or structure) if it is determined to not be feasible to locate on other poles or structures in the vicinity or if the City determines that the other sites are too impactful on the surrounding properties. All new pole or wireless support structures shall incorporate the highest level of stealth and concealment of the antennas and wireless equipment in order to minimize the visual impact of the site to the surrounding properties.

#### 5.1 General Standards

- 1) A new pole or wireless support structure shall be designed to minimize the visual and aesthetic impact of the new vertical element and associated equipment upon the look, feel, theme, and use of the surrounding area.
- 2) An SWF shall be designed to blend in with the surrounding streetscape so as to provide minimal visual impact.
- 3) The new pole or wireless support structure shall be architecturally integrated and compatible with the use of the surrounding area.
- 4) All plans shall be signed and sealed by a Professional Engineer registered with the State of Arizona.

#### 5.2 Detailed Standards

- 1) New Pole or Wireless Support Structure Height
  - a. A new small wireless facility pole or wireless support structure may be installed without zoning review provided the new pole or wireless support structure is fifty (50) feet in height or less, including the antennas.
- 2) Overall Height of New Pole or Wireless Support Structure
  - a. The height of a new pole or wireless support structure is measured from grade to top of the highest point of the structure, including all antennas and equipment.
- 3) Outside Diameter of Monopole

a. The maximum outside diameter of a monopole, as defined in A.R.S. § 9-591(13), shall not exceed forty (40) inches.

#### 4) Zoning Review

a. Monopoles that are subject to zoning review shall be in conformance with Title 15 of the Yuma City Code.

#### 5) Stealth and Concealment Elements

- a. As part of the stealth and concealment elements of the wireless support structure, the City may require the authorized installer to install street name plates, directional signs, and other decorative signs or artistic elements on the structure.
- b. The wireless provider is solely responsible for the cost of all stealth and concealment elements and the installation of other elements required by the City.
- c. The wireless provider is responsible for the performance of and any costs incurred for regular upkeep, maintenance and replacement (if necessary) of these stealth and concealment elements.

#### 6) Foundation

- a. The foundation for a new wireless support structure shall conform to civil and structural engineering standards as required by the City.
- b. The height of the foundation shall be two (2) inches above finished grade. However, if the foundation is adjacent to or within a sidewalk or ramp, the height of the foundation shall be flush with the surface of the immediate area.
- c. Shrouds for the mounting bolts may be required.

### 7) Painting of Wireless Support Structure, Antennas and Mounting Equipment

- a. The City shall identify the paint colors, location of paint and any decorative treatments that may be required on the new wireless support structure.
- b. The City shall identify the paint colors for the antennas, antenna mounting brackets and posts, antenna shrouds, and cables.
- c. The City may require a new wireless support structure to be painted using a non-reflective paint.
- d. Any wireless support structure placed in a location included within a City adopted aesthetic overlay area, design review district or historic district or included in an agreement regulating design aesthetics must comply with the overlay area, district or

agreement requirements relating to color palette or design elements.

#### **Contact Information**

For questions regarding these standards, please contact the Department of Community Development at (928) 373-5175.